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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/997,299  
Filing Date: November 29, 2001  
Appellant(s): XYDIS, THOMAS G.

Kristopher K. Hulliberger (Reg. #: 53,047)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/23/07 appealing from the Office action mailed 10/5/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

US Patent Application Serial No. 10/948,497, which is a continuation in part of the current application.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,963,599	Curtis et al.	10-1999
6,088,451	He et al.	7-2000
6,546,425	Hanson et al.	4-2003
5,673,031	Meier	9-1997
6,192,230	van Bokhorst et al.	2-2001
5,969,678	Stewart	10-1999
6,629,151	Bahl	9-2003
6,745,013	Porter et al.	6-2004

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of He et al (US 6,088,451) and further in view of Hanson et al (US 6,546,425).

#### **Claim 1:**

Curtis discloses:

1. Transmitting a radio frequency (RF) signal from the at least one electronic device (Fig 5A-5B and col 8, lines 8-13).
2. Detecting the RF signal from the at least one first electronic device with the at least one access point (Fig 5A and col 8, lines 8-13).
3. Transmitting a radio frequency (RF) signal from the second electronic device (Fig 5A).
4. Detecting RF signal from the second electronic device with the same at least one access point (Fig 5A).
5. Enabling the at least one first electronic device to allow the user having the second electronic device to access the network and the at least one first electronic device in response to the at least one access point detecting the RF signals from both the at least one first and the second electronic devices (Fig 5A-5B and col 7, lines 63-col 8, line 13).

Note that Curtis's invention is a truncated maximum likelihood sequence estimator. However, this invention of Curtis is used by a wireless local area network which discloses the above limitations (Curtis: col 7, lines 63-66). This implies that the above limitations were well known in the art of wireless networking at the time Curtis's and applicant's inventions were made.

Curtis does not disclose:

1. Transmitting user information to identify the user from the second electronic device.
2. Retrieving user privileges for the user from a user database based on the user information.
3. Enabling access to the network and the at least one first electronic device based upon the user privileges.
4. Disabling the at least one first electronic device in response to either of the signals from the at least one first and the second electronic devices no longer being detected by the at least one access point to prevent access to the network and the at least one first electronic device.
5. Re-enabling the at least one first electronic device in response to the at least one access point detecting the RF signals from the at least one first and the second electronic devices based upon the user privileges.

However, He discloses transmitting user information to identify the user from a second electronic device (col 8, lines 35-64); retrieving user privileges for the user from

a user database based on the user information (col 8, line 65-col 9, line 61); and enabling access to the network and the at least one first electronic device based upon the user privileges (col 8, line 65-col 9, line 61).

Note that He's teachings are towards a networking environment, though not necessarily a wireless networking environment. However, the examiner asserts that it would have been obvious to one of ordinary skill in the art to incorporate He's network teachings within a wireless networking environment such that a second electronic device used by a user would have to transmit user information identifying the user and user privileges for the user are retrieved from a database based on the transmitted user information to determine the types of privileges to enable for the user on the wireless network. One of ordinary skill would have been motivated to incorporate such teachings from He because it would result in a more secure wireless networking environment.

He also does not disclose items 4 and 5 above, which were not explicitly disclosed by Curtis. However, one of ordinary skill should appreciate that if an access point is unable to detect the RF signal from either the at least one first or the second electronic device, since access to the network and at least one first electronic device is granted based on being able to detect a signal, then access would be disabled and would be re-enabled once the signals were detected again. From the perspective of the second electronic device losing access to either the network or the first electronic device is the same as if the first electronic device was disabled. Further, Hanson discloses that at the time applicant's invention was made, limitations 4 and 5 above, which were not explicitly disclosed by Curtis, were well known in the art of wireless.

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networking (col 2, lines 7-29). At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to further modify the wireless network disclosed by Curtis according to the limitations recited in claim 1. One of ordinary skill would have been motivated to incorporate Hanson's teachings because by definition, if either of the signals which allow access between a networking device and the network, including the devices on the network, are no longer detected, then access has been disabled. One of ordinary skill would have been motivated to re-enable access once the signals have been detected again because it is standard practice in the art of computing to be able to reconnect to networks and networking devices once networking pathways are reestablished.

Claims 2, 4-5, 7, 15, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of He et al (US 6,088,451) and Hanson et al (US 6,546,425) and further in view of Meier (US 5,673,031).

**Claim 2:**

Curtis does not disclose the steps of measuring a signal strength for the RF signals from both the at least one first and the second electronic devices, comparing the signal strengths to a predetermined threshold, and enabling the at least one first electronic device in response to both of the signal strengths being above the predetermined threshold.



However, Curtis discloses an access point configured to detect RF signals from a nearby device (Fig 5A and col 8, lines 8-13). Also, Meier discloses detecting signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station--i.e. an access point (col 5, lines 13-26). Note that although Meier does not teach that the RF signals from the mobile unit is measured against a threshold value, because Meier discloses the concept of measuring the strength of an RF signal, it would be obvious to one of ordinary skill to measure the signal strength from either the mobile unit or the base unit (i.e. access point). The choice of having either the mobile unit/electronic device or base unit/access point decide whether to enable a connection based on the signal strength is arbitrary since applicant's specification did not disclose any particular reason for choosing one method over the other. If one of ordinary skill decides to have the mobile unit decide whether a connection should be made, then one skilled should appreciate that the mobile unit would need to detect and measure the signal strength from the base unit. If one of ordinary skill decides that the base unit should decide whether to enable a connection, then one skilled should appreciate that the base unit needs to detect and measure the signal strength from the mobile units. In most wireless networks, both the mobile unit and the base unit each detect an RF signal and make a decision.

It would have been obvious to one of ordinary skill at the time the applicant's invention was made in light of Meier's teachings to further modify the method of claim 1

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according to the limitation recited in claim 2. One of ordinary skill would have been motivated to do so as Meier's teachings allows for the connection of an electronic device to an access point with the strongest signal strength (col 5, lines 20-26). A strong signal coming from a specific access point to a mobile electronic device means that a strong signal from the mobile device must also go to the specific access point. A stronger signal between an access point and an electronic device usually means more reliable and faster communication between an electronic device, the access point, and any other devices attached to the access point.

**Claim 4:**

Curtis disclose the step of transmitting data from either one of the at least one first and the second electronic device to the least one access point and routing data from the at least one access point to the other electronic device (Fig 5A, and col 8, lines 8-13).

**Claim 5:**

Curtis discloses the step of activating either one of the at least one first and the second electronic device to transmit the data directly to the other in response to instructions from the at least one access point thereby bypassing the at least one access point (Fig 5B and col 8, lines 8-13).

**Claim 15:**

Curtis does not explicitly disclose wherein the step of disabling the at least one first electronic device is further defined as disabling the at least one first electronic device in response to either one of the signal strengths from the at least one first

electronic device and the second electronic devices being measured below the predetermined threshold by the access point to prevent access to the network and the at least one first electronic device. However, Hanson implicitly discloses this limitation (col 2, lines 7-29).

Note that applicant's specification does not define what is a threshold. Hanson discloses that when a mobile device moves out of wireless range, it is disconnected from the wireless network. The second device being disconnected from the network is essentially the same thing as the at least one first electronic device being disabled since the at least one first electronic device can no longer be connected to via the second electronic device. One of ordinary skill should appreciate that a signal not being able to be detected is below the threshold of what can be detected. One of ordinary skill would incorporate Hanson's teachings for the same reasons given in claim 1.

**Claim 7:**

Curtis does not explicitly disclose the steps of detecting the RF signals from the at least one first and the second electronic devices by a different access point, measuring the RF signal strengths at the different access point, and re-enabling the first electronic device in response to the RF signals from the first and the second electronic device being above the predetermined threshold.

However, Meier discloses detecting signal strengths in a wireless network and only considering signals that meet a minimum threshold (col 5, lines 8-20). Meier also discloses using signal strength to decide whether an electronic device—i.e. a mobile unit, should enable a connection to a base station--i.e. an access point (col 5, lines 13-

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26). Meier also discloses re-evaluating the base station/access point that an electronic device is connected to based on re-evaluating RF signal strength and connecting to a different base station or access point (col 5, line 66-col 6, line11).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made in light of Meier's teachings to further modify the method of claim 15 according to the limitations recited in claim 7. One of ordinary skill would have been motivated to do so as Meier's teachings allows for the connection of an electronic device to an access point with the strongest signal strength once one becomes available (col 5, lines 20-26). A stronger signal means more reliable communications between the devices.

**Claim 8:**

Curtis does not disclose loading user data into each of the access points in response to at least one access point measuring the RF signal from the second electronic device as being above the predetermined threshold. However, this is implicitly disclosed by Hanson (col 2, lines 7-29).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of He et al (US 6,088,451) and Hanson et al (US 6,546,425) and further in view of Meier (US 5,673,031) and van Bokhorst et al (US 6,192,230).

**Claim 6:**

Curtis and Meier do not disclose the step of activating either one is further defined as transmitting timing intervals from the access point to either one of the first and the second electronic devices and activation the one during the timing intervals to detect the other. However, van Bokhorst discloses a wireless network wherein synchronizing messages and traffic indicator information are broadcasted to stations (i.e. electronic devices) which are identified to stay awake for a time period to receive one or more data messages (col 1, line 57-col 2, line 6). In light of van Bokhorst's teachings, it would have been obvious to one of ordinary skill in the art to further modify Curtis and Meier's combination method according to the limitation recited in claim 6. One of ordinary skill would have been motivated to do so as van Bokhorst discloses that his teachings would allow for a wireless communication system/network to have a power saving function (col 1, lines 53-56). Note that this is a useful feature for anyone who is either environmentally conscious or wants to lower his/her power bills.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al (US 5,963,599) in view of He et al (US 6,088,451) and Hanson et al (US 6,546,425) and further in view of Meier (US 5,673,031) and Stewart (US 5,969,678).

**Claim 9:**

Curtis does not disclose synchronizing the user data from the different access points to the at least one first electronic device in response to the RF signal from the

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second electronic device being above the predetermined threshold at the different access point.

However, Stewart discloses the step of synchronizing the user data from the different access points to the first electronic device (col 6, lines 29-39). Stewart does not disclose said step being done in response to the RF signal from the second electronic device being above the predetermined threshold at the different access points.

However, Meier discloses detecting the RF signal strength in a wireless network and only doing something if the RF signal strength is above a certain threshold (col 5, lines 13-26). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to further modify the method of claim 8 in light of according to the limitations recited in claim 9 in light of Stewart's teachings. One of ordinary skill would have been motivated to do so because it would prevent a user from gaining access to resources in a network before being authenticated.

Claims 10-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahl (US 6,629,151) in view of He et al (US 6,088,451) and Porter et al (US 6,745,013) and further in view of Hanson et al (US 6,546,425).

**Claim 10:**

Bahl discloses:

1. Transmitting a radio frequency signal from the second electronic device to establish communication with at least one access point (Fig 3 and col 5, lines 50-64).
2. Detecting the RF signal from the second electronic device with a first and a second access points (Fig 3 and col 5, lines 50-64).
3. Enabling a predetermined number of first electronic devices in response to the detected RF signal strength being above a predetermined threshold to allow access to the network and the first electronic device (Fig 3; col 5, lines 50-58 and; col 8, lines 49-64).
4. Transmitting data from the second electronic device through the access point to the predetermined number of first electronic devices thereby establishing communication between the first electronic devices and the second electronic device (col 5, lines 50-58; col 8, lines 49-64; and col 16, lines 5-11).

Bahl does not disclose:

1. The transmission from the second electronic device including user information to identify the user.
2. Measuring the strength of the RF signal from the second electronic device at the first and second access points.
3. Comparing a maximum measured RF signal strength by either of the first and second access points to a predetermined threshold.

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4. Retrieving user privileges for the user from a user database based upon the user information.
5. Enabling a predetermined number of first electronic devices based upon the user privileges.
6. The access point measuring the maximum RF signal strength.
7. Disabling the at least one first electronic device in response to the RF signal strength from the second electronic device being measured below the predetermined threshold to prevent access to the network and the at least one first electronic device.
8. Re-enabling the predetermined number of first electronic devices in response to the detected RF signal strength being above the predetermined threshold by either of the first and second access points and based upon the user privileges.

However, He discloses the transmission from a second electronic device including user information to identify the user (col 8, lines 35-64); retrieving user privileges for the user from a user database based on the user information (col 8, line 65-col 9, line 61); and enabling access to a predetermined number of first electronic device based upon the user privileges (col 8, line 65-col 9, line 61). Further, Porter discloses access points being used to measure the (maximum) RF signal strength from a second electronic device and comparing the maximum measured RF signal strength measured by the access point to a predetermined threshold (col 2, lines 7-11). Hanson discloses disabling the at least one first electronic device in response to either the RF



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signal strength from the second electronic device being measured below the predetermined threshold to prevent access to the network and the at least one first electronic device; and re-enabling the predetermined number of first electronic devices in response to the detected RF signal strength being above the predetermined threshold by either of the first and second access points and based upon the user privileges (col 2, lines 7-29).

These teachings by He, Porter, and Hanson read on the limitations not met by Bahl. At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Bahl's invention according to the limitations recited in claim 10. One of ordinary skill would have been motivated into incorporate He's teachings because it would increase the security of the wireless network. One of ordinary skill would have been motivated into incorporate Porter's teachings because it would allow devices in the network to be able to adjust their transmission power level to constantly transmit signals of a certain strength—this would allow devices to lower their transmission power when possible and lower the amount of power they use or increase the transmission power, thereby increasing a signal's strength if a mobile device is far from an access point, resulting in better connection between a mobile device and an access point. One of ordinary skill would be motivated to incorporate Hanson's teachings because it is standard practice in the art of networking to disable a connection or electronic device when a signal can no longer be detected and to re-enable it when the signal is detected once more.

**Claim 11:**

As per claim 11, Hanson implicitly discloses loading user data into the first and the second access points in response to the RF signal from the second electronic device being above the predetermined threshold at either of the first and second access points (col 2, lines 7-29).

**Claim 12:**

As per claim 12, Bahl discloses transferring communication to one of the first and second access points in response to the RF signal strength at the other access point falling below the predetermined threshold (col 8, lines 49-59).

**Claim 14:**

As per claim 14, Bahl does not explicitly disclose removing the user data from the first and the second access points in response to the RF signal strength falling below the predetermined threshold at the first and second access points. However, it is common practice in the art of networking not to keep user data once a user has disconnected for security purposes. For example, when a user closes a browser, use data such as passwords and user id's to websites they have logged into do not get retained unless the user specifically chose to have the system do so. IT would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to further modify Bahl's invention according to the limitations recited in claim 14. One of ordinary skill would have been motivated to do so because requiring a user to log in again after they have been disconnected would increase security for a system.

### **(10) Response to Argument**

As a preliminary matter, it is noted that appellant submitted an IDS on 8/23/07, after the Final Office action mailed on 10/5/06. The document listed in the IDS has been considered.

Appellant's arguments presented in the appeal brief filed on 8/23/07 are directed mainly towards independent claims 1 and 10. The claims dependent on claims 1 and 10 are argued as allowable due to dependency on claims 1 and 10. However, as the examiner will show herein, claims 1 and 10 are not allowable because contrary to appellant's arguments, adequate prima facie case of obviousness was made for the claims.

Appellant's first argument for claim 1 can be found on pages 8-9 of the appeal brief filed. Appellant argues that claim 1 is allowable because prima facie case of obviousness has not been met because the examiner's reliance on Curtis, He, and Hanson do not teach all the limitations of claim 1. Specifically, appellant argues that the references used by the examiner does not teach the limitation of "the first electronic device is enabled in response to the access point detecting the RF signal *from both the first and the second electronic devices and based upon the user privileges.*" First, the examiner notes that Curtis was relied upon to teach the portion of the limitation of "the first electronic device is enabled in response to the access point detecting the RF signal from both the first and the second electronic devices (Fig 5A-5B and col 7, line 63-col 8, line 13). He's teachings were further relied upon to teach the portion of the limitation of

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enabling access to the network and the first electronic device based upon the user privileges (col 8, line 65-col 9, line 61). Further, the examiner would like to draw attention to the fact that the claim does not define in what manner the first electronic device is enabled. As such, in applying a broad, yet reasonable interpretation to the claim, the examiner believes that the first electronic device becoming accessible to the second electronic device meets the limitation under contention. Appellant states on page 9, lines 9-10 of the appeal brief filed that "[s]o long as the electronic devices communicate with the same access point, the first electronic device is enabled to allow access thereto". However, this statement appears to be based on an analysis of Curtis's teachings alone while as pointed out above, the particular limitation under contention was rejected relying on the teachings of Curtis and He. He, as will be shown below, taught that even if there is a connection between two network devices, access from one device to another is not enabled unless the user has proper privileges. It is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The portions of Curtis cited by the examiner discloses two laptops (see Fig 5a, station 1W and nW) which are considered the first and second electronic devices respectively communicating with the same access point 16, which has detected RF signals from both the first and second laptop. Since the laptops are communicating with the same access point, based on what appellant has admitted, the first electronic device

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(station 1W) is enabled to allow access thereto from the second electronic device (station nW) due to/in response to the access point detecting the RF signal from both the first and second electronic devices. Note that Curtis's teachings do not take into account any security protocol that the first electronic device might have which might prevent access by the second electronic device even though they are both connected to the same access point.

He's teachings are directed towards network security techniques for securing network elements. From He's teachings, it is obvious to one of ordinary skill in the art that the need to secure a network was a well known problem in the art of networking. The portion of He cited above (col 8, line 65-col 9, line 61) teaches controlling access to various network elements based on whether or not a user has been properly authenticated and based on the user's privileges to specific network elements. If the user is not authenticated or does not possess proper privileges to a network element, access to a network element is denied, i.e. the network element is not enabled for access. However, if the user possesses proper credentials, the user is allowed access to the network element based on the user's privileges. Based on this additional teaching by He, which recognizes the need to secure networks (i.e. such as the wireless network seen in Figure 5A of Curtis), it would have been obvious to one of ordinary skill in the art to enable the first electronic device (for access) in response to not only the first access point detecting the RF signal from both the first and second electronic device, *but also based on the user's privileges.*

Appellant argues on the second paragraph on page 9 of the appeal brief filed that the art relied upon by the examiner also does not teach "disabling the first electronic device 18 in response to either one of the signal strengths from the first electronic device 18 and the second electronic devices 12 no longer being detected by the access point 20 and re-enabling the first electronic device 18 in response to the access point 20 detecting the RF signals 48, 50 from both the first 18 and the second electronic devices 12 above the predetermined threshold and based upon the user privileges." The examiner respectfully disagrees.

The examiner notes that with respect to the claim, it appears that perhaps the examiner's interpretation of what it means for a device to be enabled or disabled is broader than what appellant meant for it to mean based on what is disclosed in the specification. However, in examination of the claims, limitations from the specification are not read into the claims. As noted previously, based on Curtis and He's teachings, the examiner interpreted the first electronic device being enabled as it and the second electronic device communicates with the same access point (i.e. the access point detects the RF signal from both devices) and the first electronic device allows the second to access its resources based on the credential and privileges of the user of the second electronic device (i.e. as per He's teachings). Based on this interpretation of enabling, then by definition, if the RF signal from either devices could no longer be detected by the access point, then the first and second device can no longer communicate with each other, thus the first electronic device is disabled due to either one of the signal strengths from either the first or second device no longer being

detected by the access point. If the user of the second device loses authentication to the first device for any reason, then by definition of what it means for the first device to be enabled, the first device also becomes disabled based on the user privileges.

Further, Hanson recognizes that in a mobile wireless network, mobile devices (i.e. such as station 1W and nW seen in Figure 5a of Curtis) occasionally loses connection with other devices in the network (col 2, lines 7-29), which reads upon disabling the first electronic device 18 in response to either one of the signal strengths from the first electronic device 18 and the second electronic devices 12 no longer being detected by the access point 20. If all the signals required for communication between the devices are not detected, then the first electronic device is disabled and a user of a second electronic device cannot access the network. The portion of Hanson cited also discloses that the wireless devices are also capable of coming back into signal range with each other and requiring re-authentication of a user before access to previously access resource are restored/re-enabled. This reads on re-enabling the first electronic device 18 in response to the access point 20 detecting the RF signals 48, 50 from both the first 18 and the second electronic devices 12 above the predetermined threshold and based upon the user privileges. Note that an access point detecting the signals from both devices and the user becoming re-authenticated essentially means that the first device becomes enabled once more for the user of the second device to access the first device via the second device.

In the paragraph spanning pages 10-11 of the filed appeal brief, appellant states that the portion of Curtis cited (including Figure 5a) does not teach allowing access to

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the at least one first electronic device and the network to a user having the second electronic device in response to at least one access point detecting the RF signals from both the at least one first and the second electronic device. However, this statement appears to contradict what appellant admitted on page 9, lines 9-10 of the filed appeal brief, where appellant admitted that so long as electronic devices with the same access point, the first electronic device is enabled to allow access thereto. As previously discussed, Figure 5a of Curtis shows two wireless devices communicating via RF signals with the same access point. If a device is enabled to allow access because it communicates via RF signals with the same access point as another device, then it is enabled to allow access in response to the access point detecting RF signals from both the first and second devices. A person of ordinary skill in the art understands that laptops are used by users, thus in allowing access by station nW, station 1W allows access to the user of station nW.

Appellant argues on pages 11-12 of the filed appeal brief that He and Hanson do not teach allowing access to the at least one first electronic device and the network to a user having a second electronic device in response to at least one access point detecting the RF signals from both the at least one first and second electronic devices. However, as discussed above, Curtis was relied upon to reject this particular limitation. Note that the first device is part of the network, thus in allowing access to the first device, access to the network is also allowed. He was additionally relied upon to teach enabling access also based on user's privileges.



On page 13 of the appeal brief filed, appellant argues the examiner has not provided any motivation to combine the references and instead argues that the limitations are intended use and gave them no patentable weight. The examiner respectfully notes that as explained in the Final Office action mailed on 10/5/06 (see pages 2-3 of office action), the examiner applied two interpretations to the claims. In a first interpretation, the enabling of the first electronic device done *to allow the user access to the network* was not given patentable weight. In this interpretation, the examiner did not believe that it was relevant towards patentability of claim 1 why the enabling of the first electronic device was done. As appellant recognizes in the second paragraph on page 13 of the filed appeal brief, functional limitations should be given weight. However, a clause that explains why something is done in a claim is not a functional limitation since it does not define any functionality. Further, in a second interpretation of the claim, why the enabling was done was also given weight, but the art of record still rendered the limitation under contention and claim 1 as a whole obvious. If access to the first electronic device (i.e. station 1W of Curtis) was enabled for a second electronic device (i.e. station nW) then it is also enabled for the user of the second device, especially in light of the fact that based on the additional teachings of He, access is not enabled unless the user is authenticated and has proper privileges. Thus, contrary to appellant's arguments, the examiner did not ignore or discount entire limitations from the claim.

On pages 14-15 of the filed appeal brief, appellant states that the examiner fails to provide adequate motivation for combining the arts used to rejection claim 1.

Appellant argues in the last paragraph on page 15 that the examiner merely provided a reason without providing any source of source a motivation. The examiner respectfully notes that a reason for doing something is a "motivation". It is noted that the rationale to modify or combine the prior art may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In *re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In *re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The portion of Curtis cited by the examiner in the rejection of claim 1 is directed towards a wireless network in which Curtis's invention may be used. He's teachings are directed towards security in a network. From He's teachings, it is implied to one of ordinary skill in the art that at the time appellant's invention was made, securing access to elements of a network was something that was desirable. Since the portion of Curtis cited discloses a network, it would have been obvious to one of ordinary skill in the art to incorporate He's teachings within the wireless network disclosed by Curtis since it would result in a secure wireless networking environment. This motivation is one which is implied by the prior art and may be reasoned by one of ordinary skill in the art from the prior art of He and Curtis. Note that this motivation was given on page 10 of the Final Office action for why one skilled would have been motivated to incorporate He's teachings with Curtis's.

As for why one skilled in the art would have been motivated to incorporate Hanson's teachings, the Final Office action also provided motivation (see pages 10-11

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of the office action). The portion of Hanson cited teaches certain features that are standard to many wireless networks. Hanson taught that it was standard in many wireless network for devices to lose communication with each other due to the wireless signal no longer being detected (i.e. due to a "hole" in wireless coverage) and for communication to be re-established once the signal was detected again and the user re-authenticated. Since Curtis's network is wireless, one skilled would have been motivated to incorporate Hanson's teachings so that Curtis's devices could properly re-establish communicate with each other during periods when RF signals are lost and re-detected. A person of ordinary skill in the art is one having ordinary creativity and common sense, thus would recognize that if one did not incorporate Hanson's teachings, one could quickly end up with a network which ceases functioning properly every time devices moved in and out of network "holes".

Appellant argues on page 16 that while Curtis, He, and Hanson have generally overlapping disclosures in that they pertain to computers and networks, they do not address the same problem or is related in scope of technology as the claimed invention. In response, it is noted that the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Further, as recently noted in the recent decision by the Supreme Court in *KSR vs. Teleflex*, known work in one field of endeavor may prompt variations of it for use in a different field. Just because Curtis,

He, and Hanson's teachings are applied to different problems or different areas than what appellant has tried to address is not a valid reason for claim patentability.

In the last paragraph on page 16 of the filed appeal brief, appellant argues that the examiner has used the claimed invention as a roadmap to find the prior art components and is using hindsight reasoning to reject the claims. In response, the examiner notes that it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

It is believed that all of appellant's arguments for claim 1 have been addressed and traversed. Because Curtis, He, and Hanson teaches all the limitations recited in claim 1 and because proper motivations for combining the teachings of the references to arrive at the claimed invention were given by the examiner, the examiner respectfully submits that prima facie case of obviousness was made for claim 1 and thus claim 1 is not ready for allowance.

It is noted that in leading up to the arguments for the rejection of claim 14 on page 17 of the appeal brief filed that appellant used a heading referring to "Rejection of claims 5, 10-12, and 14". This appears to be a typo since the heading does not match appellant's arguments. The examiner assumes the heading should be "Rejection of

claims 10-12 and 14". This informality is excused under MPEP 1205.03 since it does not appear to affect the substance of the brief.

On first paragraph on page 18 of the filed appeal brief, appellant argues that Bahl does not teach providing security to a user carrying a second electronic device. The examiner respectfully notes that the examiner never stated in the office action that Bahl taught providing security to a user carrying a second electronic device. Further, it is noted that claim 10 is directed towards a "method of security access to a network ... from a user having a second electronic device...". Thus, rather than providing security to a user carrying a second electronic device, the method of claim 14 is directed toward security a network from a user carrying a second electronic device (see preamble of claim 10). Thus, it is unclear how appellant's argument is related to the claimed invention in any manner.

In the first a paragraph on page 18 of the filed appeal brief, appellant also argues that Bahl teaches away from the subject invention by stating that the hardware is forced to maintain a connection with a specific base station, whereas the subject invention specifically provides for allowing access based upon at least one access point out of the detecting two access points measuring a signal strength above the threshold and transmitting data through the access point. The examiner respectfully submits that Bahl does not teach away from the subject invention. Column 2, lines 10-13 that appellant cited states that forcing hardware to maintain connection to a base station is one example of setting an attribute in Bahl's invention, not that forcing to maintain a

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connection is required in his invention. Column 8, lines 49-59 of Bahl even discloses of a wireless station in Bahl's invention switching from one access point to another having a stronger signal. In other words, signal strength is measured and when a certain threshold is reached, a switch to another access point having a stronger signal is triggered. Clearly there is no requirement that hardware maintain a connection to a base station if a wireless station is allowed to switch from one access point to another.

In paragraphs 2-3 of page 18 in the appeal brief filed, appellant argues Bahl does not disclose enabling a predetermined number of first electronic devices in response to the RF signal from a second electronic device having a strength above the predetermined threshold at either one of a first and second access point. Once again, the examiner respectfully submits that perhaps appellant is applying a narrower interpretation for what it means for a first electronic device to be enabled than the examiner had applied. The examiner believes, that a first electronic device being capable of communicating with the second reads on the first device being enabled. Being capable in this case requires that there is a strong enough RF signal between the first device and an access point and the same access point and a second device. Cited Figure 3 of Bahl shows a wireless network having multiple base stations/access points and a first and second electronic device, i.e. portable computers 120 and 130. Both portable computers have an RF signal strong enough, i.e. that is above a predetermined threshold, that could be detected by the same access point 128. As admitted by appellant on page 10 of the filed appeal brief so long as electronic device communicate with the same access point, the first electronic device is enabled to allow access

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thereto. Column 5 and 8 cited by appellant on page 18 of the filed appeal brief shows that a wireless device only communicates with an access point if the RF signal between the two is above a predetermined threshold. If the RF signal ever falls below the threshold, it triggers a handoff to another access point.

Appellant also argues on page 19, that Bahl does not teach re-enabling the first electronic devices as claimed. The examiner submits once more that appellant's interpretation of what it means for a device to be enabled or re-enabled is too narrow. The first device being capable of communication could be interpreted to mean that it has been enabled to communicate with the second device. Further, Hanson was relied upon to disclose re-enabling the first electronic devices as in claim 1. Since the explanation of why Hanson meets this limitation was already elaborated upon in the traversal to the arguments for claim 1, it will not be repeated here since the same traversal is applicable to claim 10 also.

On page 20 of the filed appeal brief, appellant argues that there is no motivation provided in Bahl to combine Bahl with the teachings of He, Porter, and Hanson. The examiner respectfully notes that the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Like Curtis, which was relied upon to reject claim 1, Bahl discloses of a wireless network. From He's

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disclosure, one skilled would have recognized that it would be desirable to provide networks with security, thus it would have been obvious to one skilled in the art to incorporate He's teachings within the wireless network of Bahl since it would provide security to Bahl's wireless network. One skilled would have been motivated to incorporate Porter's teachings because Porter's teachings would allow one to control the transmission power of the wireless devices in Bahl's network, which would provide for better RF connections between devices since one could control the RF signal strength as needed. One skilled would have been motivated to incorporate Hanson's teachings within Bahl's for the same reasons one would have wanted to incorporate Hanson's teachings with Curtis in claim 1 since both Bahl and Curtis deal with wireless networks. Note that all these motivations were given on page 20 of the Final Office action. Further note that Bahl's wireless network as disclosed by Bahl was ready for improvement and incorporating the known teachings of He, Porter, and Hanson would do no more than yield predictable results of a wireless network having authentication security, where the devices are capable of controlling their RF signal strength as needed, and wherein devices were capable of becoming re-enabled for communication if it lost a connection due to a network "hole".

On page 21 of the filed appeal brief, appellant argues that the examiner has not made prima facie case of obviousness since the motivations given by the examiner for combining the teachings of the references were considered by appellant to be based on the examiner's opinion. The examiner respectfully disagrees. As evidenced above, the motivations given by the examiner were not merely the examiner's opinion, but rather



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ones which flowed from the prior art and/or knowledge of one skilled in the art at the time appellant's invention was made. The examiner respectfully submits that appellant appear to want a strict TSM test applied when examining the claims. However, as recognized by the Supreme Court recently in KSR vs. Teleflex, such a strict approach in obviousness determination is an error and a flexible approach should instead be used. Since appellant has provided no evidence of secondary consideration which would prove these motivations given by the examiner invalid, the examiner respectfully submits that prima facie case of obviousness was met. The examiner respectfully submits that it is insufficient to merely allege that the motivations given are inadequate since such allegations appear to be based on appellant's opinion alone.

On page 22, appellant argues that as per claim 10, the prior art does not teach a predetermined number of first electronic device is re-enabled in response to detected RF signal strength being above the predetermined threshold at either one of the access points and based on the user privileges. The examiner respectfully disagrees. Hanson's teachings (col 2, lines 7-29) in which a mobile device becomes disconnected from the network due to a "hole" in the wireless interconnect and reconnecting, i.e. becoming re-enabled, when it moves back into contact and the user has re-authenticated reads on the limitation. Note that for an RF signal to be detected it must be above a predetermined threshold. It is assumed that appellant's arguments are based on what appellant believes "enabled" should mean with respect to the first electronic device. Also note that a single first electronic device meets the criteria of a pre-determined number of first electronic device.

On page 22, appellant argues that as per claim 10, the prior art does not each disabling the predetermined number of first electronic devices in response to the signal strength being below predetermined threshold. The examiner respectfully disagrees. Once again, it is assumed that this argument stems from a difference of opinion as to how one can interpret a device being enabled or disabled. With respect to the current claim, if a device is enabled in that it is capable of communication with or being accessed by another device due to both devices communicating with the same access point and the user of the other device is authenticated to access the first device, it is enabled. If the first device is no longer capable of communicating with the second device or accessed by the second device, then it can be considered disabled. The portion of Hanson cited (col 2, lines 7-29) meets the limitation because he discloses a hole in wireless coverage which causes a network device to disconnect from the network. A hole in the wireless network is an area where RF signal is below a threshold that could be detected. If a device has disconnected from the network as per Hanson's teachings due to the hole in network coverage, then the device is not enabled to communicate with the network or any other devices on the network.

On page 23 of the filed appeal brief, appellant states that the examiner has disregarded claim language to make the obviousness rejection. As evidenced by what has been discussed above and from the Final Office action, the examiner respectfully submits that this is incorrect. The examiner may have interpreted some portions of the claim language as directed towards intended use, but explained why that was so and

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also provided further explanation in the office action wherein even if those language were given weight, the prior art of record still renders the claim as a whole obvious.

Appellant argues that the examiner provided motivation based on his own reasoning which was forbidden based on the Exhibit B, Focarino's USPTO memorandum. The examiner respectfully notes that Focarino's memorandum does not prohibit motivation based on the examiner's own reasoning. It merely summarizes the KSR vs. Teleflex decision by the Supreme Court, which states that a flexible approach towards obviousness analysis should be applied, and reminded examiners to identify the reasons why one skilled in the art would have been motivated to modify the prior art to arrive at the invention as claimed. It is further submitted that to a certain extent all analysis of obviousness and motivation of obviousness is based on a person's opinion.

The examiner believes that all arguments presented by appellant in the current appeal brief have been traversed. As such, it is respectfully submitted that the rejections made in the Final Office action mailed on 10/5/06 should be sustain because prima facie case of obviousness were made for each of the claims. The claims are not allowable over the art of record.

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Ponnoreay Pich

/Ponnoreay Pich/

Patent Examiner, Art Unit 2135



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Attachment: IDS 8/23/07